

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) ANN-F2811	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on _____ Signature _____ Typed or printed name _____		Application Number 10/773,025	Filed 2/4/2004
First Named Inventor Armstrong		Examiner William Boddie	
Art Unit 2629		Examiner William Boddie	

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
 Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
 See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
 (Form PTO/SB/96)

☒ attorney or agent of record.
 Registration number 42,541

☐ attorney or agent acting under 37 CFR 1.34.
 Registration number if acting under 37 CFR 1.34. _____

/Michael J. Fogarty, III/
 Signature

Michael J. Fogarty, III
 Typed or printed name

972-732-1001
 Telephone number

December 10, 2008
 Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below".

☐ *Total of _____ forms are submitted.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Armstrong	Docket No.:	ANN-F2811
Serial No.:	10/773,025	Art Unit:	2629
Filed:	February 4, 2004	Examiner:	Boddie, William
For:	Image Controller		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

Pending independent claims 9 and 12 have been rejected in the Final Office Action mailed September 10, 2008 (“the Final Office Action” or “FOA”). The claims stand rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over a combination of Suzuki (U.S. Patent No. 5,491,497), Thomas, Jr. (U.S. Patent No. 5,128,671), Sharp (U.S. Patent No. 4,493,219) and Fan (U.S. Patent No. 5,926,168). The claims, however, include limitations that are not taught or suggested by any of the cited references. Since these limitations are not shown in any of the references alone, they cannot be taught or suggested by the combination of references. Therefore, the claims are not obvious and should be allowed.

Claims 9 and 12 recite, in part:

9. An image controller allowing control of an image generation device capable of creating three-dimensional imagery, the image controller comprising:
- a single input member capable of being manipulated in six degrees of freedom by a human hand;
 - ...;
 - a secondary input member capable of being controlled by the human hand bidirectionally on at least one axis;
 - two additional sensors located on [the upper surface of] the circuit board, the two additional sensors indicate movement of the secondary input member;
 - ...;

one button sensor located on [the upper surface of] the circuit board controls an ON/OFF function; . . .

I. The cited references do not teach or suggest six degrees of freedom (6 DOF)

The present application teaches that “[a] handle capable of being “manipulated” in 6 DOF [Degrees of Freedom] means only that it can be **linearly moved** and/or **rotated relative to** the reference member.” Application at 16, lines 8-10 (emphasis added). The application further describes the movement of the disclosed 6 DOF controller as providing “information describing **rotation or rotational force** of the hand operable input member in either direction about three mutually perpendicular bi-directional axes herein referred to as yaw, pitch and roll, (or first, second and third); and information describing **linear movement** of the hand operable input member along the axes . . .” Application at 11, lines 5-9 (emphasis added).

Claims 9 and 12 require “a single input member capable of being manipulated in six degrees of freedom by a human hand.” The Final Office Action cites Suzuki as teaching a single input member capable of being manipulated in six degrees of freedom. FOA at 3. In particular, the Final Office Action points to Suzuki’s housing “6” in Figure 2 as the claimed “single input member.” *Id.* The Final Office Action further points to Suzuki’s Figures 4a-11b as illustrating manipulation in six degrees of freedom. *Id.*

However, the Suzuki reference clearly limits the movement of housing 6 to four degrees of freedom (4 DOF) as illustrated in Figures 4a-11b. Upper housing section 6 and lower housing section 7 together form Suzuki’s integral housing 18. Column 4, lines 12-13; Figure 5a. The Suzuki device functions by moving integral operating member 17 relative to integral housing 18. *See, e.g.*, column 4, lines 9-13; Figures 4a, 4b. It is clear from the Suzuki disclosure and Figures 4a-11b that integral operating member 17 is only capable of movement in four degrees of freedom relative to integral housing 18.

Figures 4a-5b are side views of the Suzuki input device showing rotation around the X-axis. Column 4, lines 3-21. Figures 6a-7b are rear views of the Suzuki input device showing rotation about the Y axis. Column 4, lines 22-38. Figures 8a-9b are top views of the Suzuki input device showing rotation about the Z-axis. Column 4, lines 39-56. Figures 10a-11b are side views of the Suzuki input device showing linear movement (“vertical slide”) along the Z-

axis. Column 4, line 57-column 5, line 6. Accordingly, Suzuki discloses three degrees of rotational movement and one degree of linear movement - for a total of four degrees of freedom.

There is no disclosure in Suzuki that integral operating member 17 is capable of linear movement in the X- or Y-axes relative to integral housing 18. In fact, it is clear from the construction of the Suzuki device as illustrated in Figures 2-11b that stick 5 prevents such movement. Therefore, Suzuki not only fails to teach or suggest a 6 DOF input device, but attempting such operations (i.e. linear movement in the X- and Y-axes) would destroy Suzuki's 4 DOF device by breaking stick 5.

In view of the above remarks, Applicant submits that the Suzuki 4 DOF device does not teach or suggest "a single input member capable of being manipulated in six degrees of freedom by a human hand" as required by independent claims 9 and 12. The other cited references were not cited for this feature, and upon further review also fail to teach manipulation in degrees of freedom. Accordingly, Applicant respectfully requests withdrawal of the pending rejections and allowance of the pending claims.

II. The cited references do not teach or suggest a secondary input member

Claims 9 and 12 require "a secondary input member capable of being controlled by the human hand bidirectionally on at least one axis." The Final Office Action cites pushing pins 19e and 19f as teaching the claimed "secondary input member." FOA at 3. However, the Suzuki disclosure clearly shows that pushing pins 19e and 19f are part of housing 6. Column 4, lines 49-53. Housing 6 was previously identified in the Final Office Action as the claimed "single input member." FOA at 3. Claims 9 and 12 require a separate "secondary input member." Applicant submits that housing 6 with integral pushing pins 19e and 19f cannot be both the "single input member" and the "secondary input member."

Applicant respectfully submits that even if the Suzuki housing 6 is a "single input member," it cannot also be the "secondary input member" as required in claims 9 and 12. The other cited references were not cited for this feature, and upon further review also fail to teach a "secondary input member." Accordingly, Applicant respectfully requests withdrawal of the pending rejections and allowance of the pending claims.

III. The cited references do not teach or suggest the claimed “one button sensor”

Claims 9 and 12 require “one button sensor located on . . . the circuit board controls an ON/OFF function.” In claim 9, the one button sensor is located “the upper surface of the circuit board.” The Final Office Action cites push-button switch 2c as teaching the claimed “one button sensor.” FOA at 4. However, the Final Office Action previously identified push-button switch 2c as one of the claimed “two additional sensors.” FOA at 3. Claims 9 and 12 require separate “two additional sensors” and “one button sensor” elements. Applicant submits that push-button switch 2c cannot be both an “additional sensor[s]” and a “one button sensor.”

Applicant respectfully submits that even if the Suzuki push-button switch 2c is an “additional sensor,” it cannot also be the “one button sensor” as required in claims 9 and 12. The other cited references were not cited for this feature, and upon further review also fail to teach a “one button sensor.” Accordingly, Applicant respectfully requests withdrawal of the pending rejections and allowance of the pending claims.

Because the current rejections are new, Applicant has not previously had an opportunity to present the arguments set forth above.

In view of the above, Applicant respectfully requests allowance of the present application.

Respectfully submitted,

December 10, 2008

Date

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